Ameloblastoma

Ameloblastomas are a rare tumor entity accounting for only 10% of all odontogenic tumors.

They mostly originate from the mandible. Only a few cases are known to grow aggressively and to invade the orbit, nasal cavity, or even the brain.

Ameloblastomas are very rare slow-growing tumors that show a tendency to recur. They are responsible for only 1% of all oral tumors. Their growth can be enormous, and they can extend into sinusoidal cavities, the orbit, and the brain. Complex and extensive palliative surgery can ease the concerns of these patients and prolong their survival [1].

Treatment

When tumor-free surgical margins are not possible, radiation therapy may offer palliation of disease [2].

Case series

Six cases of maxillary ameloblastoma treated at the UCLA hospitals; four of these cases showed extensive and destructive tumor growth involving vital structures, including the orbit, base of skull, and parasellar structures. Two of four patients with extensive disease died of their tumors, one, with extensive involvement of the base of the skull, became unavailable for follow-up, and, one year after diagnosis, one is alive with middle cranial fossa disease. A review of the medical literature provides further evidence of the locally aggressive behavior and potentially lethal nature of this tumor. No effective treatment has evolved for extensive ameloblastomas of the maxilla that have invaded surrounding vital structures. When tumor-free surgical margins are not possible, radiation therapy may offer palliation of disease [3].

Case reports

2016

Quick-Weller et al., published the case of a 57-year-old patient who was admitted with a huge tumor involving the nasal cavity, the left maxilla, and the anterior fossa. Histologic diagnosis was made by biopsy. A combined two-stage neurosurgical maxillofacial approach was planned. First the intracranial tumor mass was removed using bifrontal trepanation. A duraplasty was sewn in to cover the brain. In the second procedure, a combined bifrontal and midfacial approach was used by craniofacial plastic surgeons and neurosurgeons. A perisinusoidal tumor mass and retropharyngeal tumor mass was removed up to the skull base. The left orbit was completely exenterated, and a fibular bone-muscle graft was used for palatal, orbital, and facial reconstruction. The facial vein and artery were carefully prepared to feed the bone-muscle graft by end-to-end anastomoses.

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[1], [4]
Quick-Weller J, Koch F, Dinc N, Lescher S, Baumgarten P, Harter P, Scheerer F, Sader R, Seifert V, Marquardt G, Freiman T. Intracranial Ameloblastoma Arising from the Maxilla: An Interdisciplinary Surgical Approach. J Neurol Surg A Cent Eur Neurosurg. 2016 Dec 30. doi: 10.1055/s-0036-1594236. [Epub ahead of print] PubMed PMID: 28038480.

[2], [3]
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